

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION N	O. F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,406		01/22/2002	Harlan T. Beverly	ITL.0702US	5109
21906	7590	09/26/2006		EXAMINER	
TROP PRUNER & HU, PC				TAYLOR, NICHOLAS R	
1616 S. V	OSS ROAD	, SUITE 750			
HOUSTON, TX 77057-2631				ART UNIT	PAPER NUMBER
				0141	

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/054,406	BEVERLY, HARLAN T.				
Office Action Summary	Examiner	Art Unit				
	Nicholas R. Taylor	2141				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 26 Ju	une 2006.					
· _ · · _ ·	action is non-final.					
	·					
Disposition of Claims						
4) ⊠ Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-32 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 22 January 2002 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	(a) accepted or (b) objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)				

DETAILED ACTION

1. Claims 1-32 have been presented for examination and are rejected.

Response to Arguments

2. Applicant's arguments filed June 26th, 2006, with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 2-8, 13-17, 25, 27, 28, 31, and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Claim 2 refers to "identifying a first data element to be removed" where the parent claim refers to only "identify[ing] a particular data element."
 - b. Claims 3 and 4 refer to "preventing the first data element from being read" without any antecedent basis.
 - c. Claim 5 refers to "writing" where the parent refers to "storing."
 - d. Claims 6-8, 13-17, 25, 27, and 28 refer to "said first data element" and/or "said other data elements" without proper antecedent basis.
 - e. Claim 13 refers to "said buffers" without proper antecedent basis.

Art Unit: 2141

f. Claims 31 and 32 present formulas that are indefinite and do not distinctly claim the subject matter which applicant regards as the invention. Claim 31 reads:

The system of claim 21 wherein the number of buffers equals the data clock size divided by the data size times the quantity of one plus the number of data elements to be removed, where the data size is the size of data to be removed.

Page 3

Claim 32 is similarly written. From these claims, the underlying mathematical formula is unclear. For example, claim 31 could represent either of the following formulas (that produce different results):

(clock size / data size) * (1 + number of data elements to remove), or ((clock size / data size) * 1) + number of data elements to remove.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-9, 11-19, and 21-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Erimli et al. (U.S. Patent 6,487,212).

Art Unit: 2141

As per claims 1, 11, and 21, Erimli teaches a method comprising:
 receiving a series of sequential data elements in a predetermined order; (Erimli, col. 6, lines 7-16; fig. 2; where data is kept in FIFO sequential order)

Page 4

analyzing the data elements sequentially in the predetermined order to identify a particular data element; and (Erimli, col. 6, lines 17-36; col. 16, lines 6-21; fig. 2, 3, and 10; where the data elements of the stream are examined to determine placement)

sequentially storing said data elements in the predetermined order by either storing the data elements in a first location or, if a data element is the particular data element, in a second location different from said first location (Erimli, col. 7, lines 34-65; col. 16, lines 6-21; see output queues of fig. 3 and reclaim queue of fig. 10).

- 8. As per claims 2, 12, and 23, Erimli teaches the system further wherein identifying a first data element to be removed includes identifying the location of virtual local area network tags within the data stream (Erimli, col. 6, lines 37-45).
- 9. As per claims 3 and 13, Erimli teaches the system further wherein preventing the first data element from being read from said first buffer includes preventing said first data element from being written to any of said one or more buffers (Erimli, col. 7, lines 34-65; col. 16, lines 6-21; see output queues of fig. 3 and reclaim queue of fig. 10).

- 10. As per claims 4, 14, and 25, Erimli teaches the system further wherein preventing the first data element from being read from said first buffer includes writing the first data element into the first buffer and then overwriting said first data element in said first buffer with one of said other data elements (Erimli, col. 7, lines 34-65; col. 16, lines 6-21; see output queues of fig. 3 and reclaim queue of fig. 10 where queues are reused).
- 11. As per claims 5, 15, and 26, Erimli teaches the system further wherein writing the other data elements into one or more buffers includes writing the other data elements into one or more other buffers having a size comparable to the size of said first data element (Erimli, col. 7, lines 34-65; col. 16, lines 6-21; see output queues of fig. 3 and reclaim queue of fig. 10, where the buffers are of comparable size to the input FIFO stream).
- 12. As per claims 6, 16, and 27, Erimli teaches the system further including producing a contiguous uninterrupted output data stream with said first data element removed (Erimli, col. 7, lines 34-65; col. 16, lines 6-21; see output queues of fig. 3 and reclaim queue of fig. 10, where the output is contiguous after recombining).
- 13. As per claims 7, 17, and 28, Erimli teaches the system further including receiving a data stream including said first data element and said other data elements and distributing said other data elements to a plurality of buffers (Erimli, col. 7, lines 34-65; see plurality output buffer queues of fig. 3).

Application/Control Number: 10/054,406 Page 6

Art Unit: 2141

14. As per claims 8, 18, and 29, Erimli teaches the system further including reading said other data elements out of said plurality of buffers through a multiplexer to generate a contiguous data stream (Erimli, col. 8, lines 23-33).

- 15. As per claims 9 and 19, Erimli teaches the system further including receiving a data unit that includes two data elements, storing one of said two data elements in a first buffer and the other of said two data elements in a second buffer (Erimli, col. 7, lines 34-65; see plurality output buffer queues of fig. 3).
- 16. As per claim 22, Erimli teaches the system further wherein said system is an Ethernet adapter (Erimli, fig. 3 see MAC interface item 50).
- 17. As per claim 24, Erimli teaches the system further wherein said control prevents the first data element from being read from any of said buffers (Erimli, col. 7, lines 34-65; col. 16, lines 6-21; see output queues of fig. 3 and reclaim queue of fig. 10).

Claim Rejections - 35 USC § 103

- 18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2141

19. Claims 10, 20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erimli et al. (U.S. Patent 6,487,212) and Dorsey et al. (US PGPub

Page 7

2001/0033580).

20. As per claims 10, 20, and 30, Erimli teaches the above, yet fails to teach

including outputting one of said two data elements through a first multiplexer and

outputting the other of said data elements through a second multiplexer.

Dorsey teaches a packet pipeline control and translation system that sends

different data elements through first and second multiplexers (Dorsey, paragraphs 0011,

0092, and figure 9).

It would have been obvious to one of ordinary skill in the art, at the time the

invention was made, to have combined Erimli and Dorsey to provide the translation

system of Dorsey in the system of Erimli, because doing so would enable enhanced

transfer speeds, providing an equivalent or closer to hardware-based translation

(Dorsey, paragraph 0038).

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP

Art Unit: 2141

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718.

Art Unit: 2141

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas Taylor Examiner Art Unit 2141

RUPAL DHARIA
RUPAL DHARIA
RUPAL PATENT EXAMINER